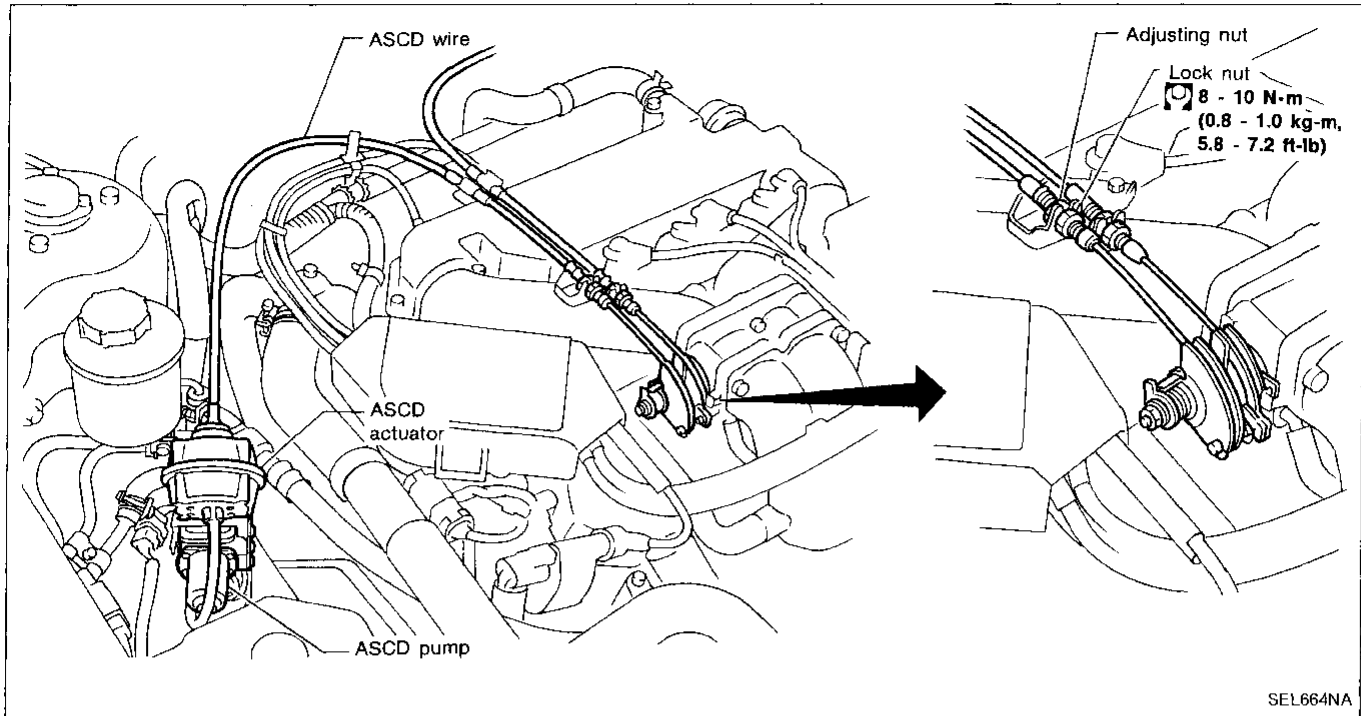


## ASCD Wire Adjustment



### CAUTION:

- Be careful not to twist ASCD wire when removing it.
- Do not tense ASCD wire excessively during adjustment.

After confirming that accelerator wire is properly adjusted, adjust the tension of ASCD wire in the following manner.

- (1) After adjusting the length of the accelerator wire, turn a securing nut by 1/2 to 1 turn from throttle open starting position to the wire loosening direction to fix. (Must be securing carried out to prevent response delay of operation of the ASCD.)
  - (2) Securely tighten lock nut to hold adjusting nut in place.
- For ASCD cancel switch and clutch switch adjustment, refer to BR and CL sections.

# AUTOMATIC SPEED CONTROL DEVICE (ASCD)

## Trouble Diagnoses

Symptom	DIAGNOSTIC PROCEDURE
ASCD control unit cannot be set properly.	1
Resume switch will not operate.	2
Cancel switch will not operate.	3
Set speed cannot be canceled.	4
Engine hunts.	5
Large difference between set vehicle and actual speed.	6

GI

MA

EV

LC

EF &  
EC

FE

CL

MT

AT

FA

RA

BR

ST

BF

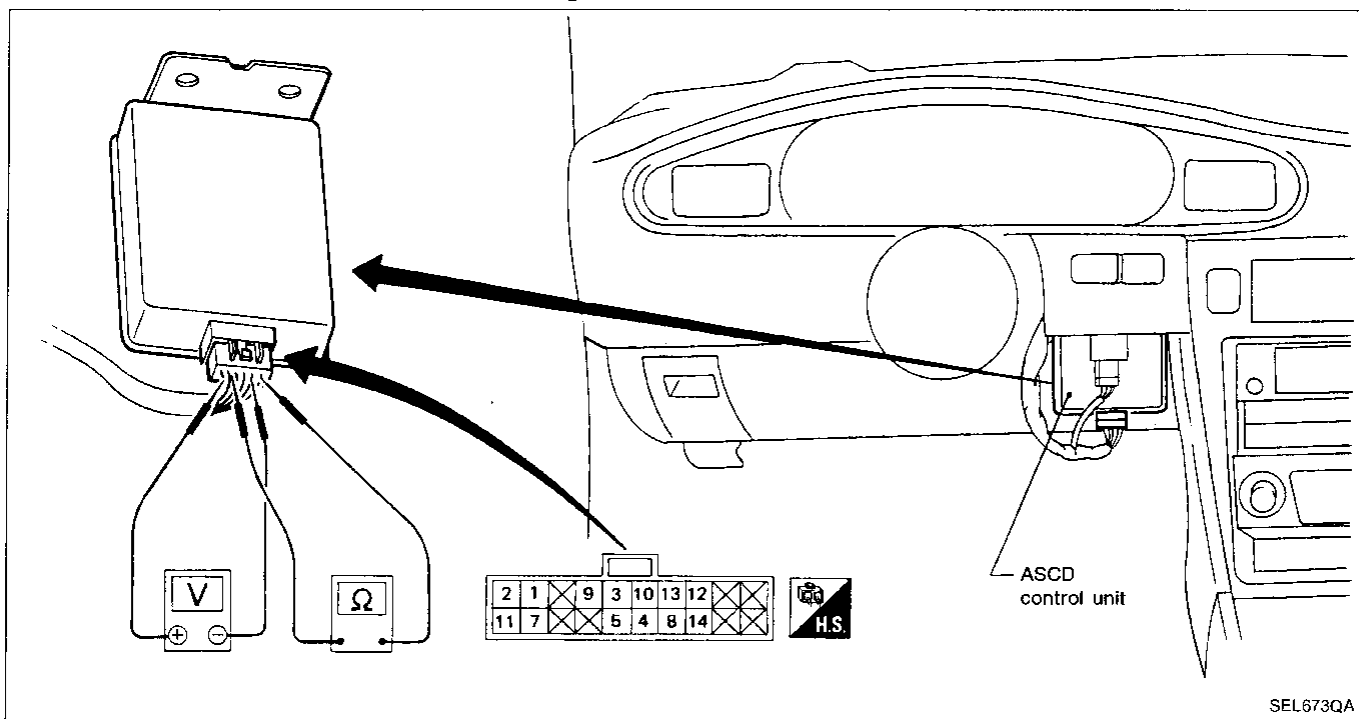
HA

EL

IDX

## PREPARATION FOR TROUBLE-DIAGNOSIS

1. Remove lower trim.
2. Remove ASCD control unit with harness connected.
3. Perform check from harness side using circuit tester, with harness connector connected.



SEL673QA

## GROUND CIRCUIT CHECK

- Check continuity between ③ and body ground.

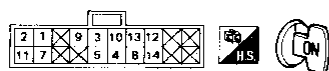
## Trouble Diagnoses (Cont'd)

### DIAGNOSTIC PROCEDURE-1

**ASCD control unit cannot be set properly.**

#### POWER SUPPLY CIRCUIT CHECK

1. Turn ASCD main switch to "ON".
2. Check voltage between ④ and ③.

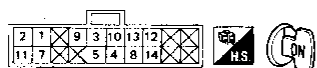


Approx.  
12V

Voltmeter

#### CUT-OFF CIRCUIT CHECK

1. Step on brake pedal.
2. Turn ASCD main switch to "ON".
3. Check voltage between ① and ③.



Approx.  
12V

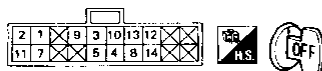
Voltmeter

Brake pedal → Step on.

SEL640QA

#### SET SWITCH CIRCUIT CHECK

1. Push ASCD set switch.
2. Check voltage between ② and ③.

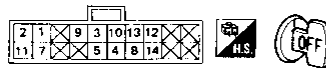


Approx.  
12V

Voltmeter

#### VEHICLE SPEED SENSOR CIRCUIT CHECK

1. Disconnect vehicle speed sensor from transmission.
  2. Connect a voltmeter between ⑦ and ③.
  3. Slowly turn vehicle speed sensor by hand to make sure voltmeter pointer deflects.
- Voltmeter pointer deflects twice per rotation of pinion.



Approx. 0.5V

Voltmeter

SEL641QA

Turn ASCD main switch "OFF" and then "ON" to make sure indicator illuminates.

NG

Check indicator bulb, ASCD main switch and hold relay.

OK

Check power supply circuit for ASCD control unit.

NG

Check ASCD power supply harness.

OK

Check cut-off circuit for ASCD control unit.

NG

Check ASCD cancel switch, clutch switch (M/T model), inhibitor relay and inhibitor switch (A/T model).

OK

Check ASCD set switch circuit for ASCD control unit.

NG

Check ASCD set switch and harness between control unit and set switch.

OK

Check vehicle speed sensor circuit.

NG

Check vehicle speed sensor and harness between ASCD control unit and vehicle speed sensor signal output terminal of combination meter.

OK

Check actuator. Refer to "Actuator Check" (EL-123).

NG

Replace actuator.

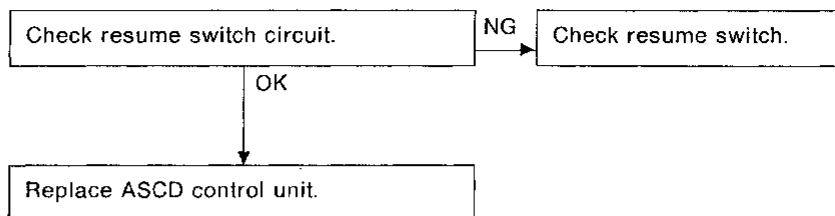
OK

Replace ASCD control unit.

## Trouble Diagnoses (Cont'd)

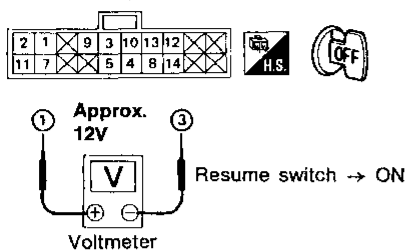
### DIAGNOSTIC PROCEDURE-2

**Resume switch will not operate.**



#### RESUME SWITCH CIRCUIT CHECK

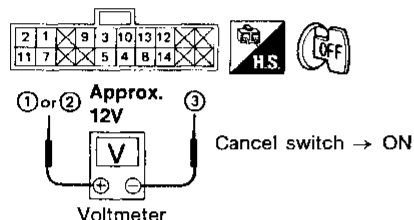
1. Turn resume switch to "ON".
2. Check voltage between ① and ③



SEL549R

#### CANCEL SWITCH CIRCUIT CHECK

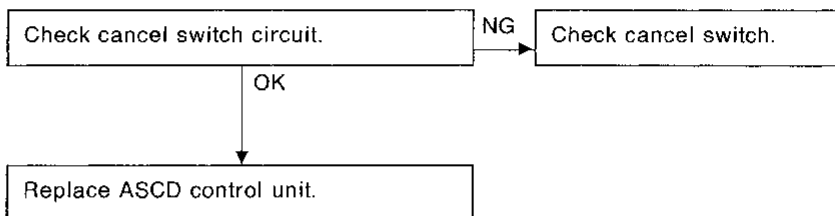
1. Turn cancel switch to "ON".
2. Check voltage between ② and ③ or ① and ③.



SEL550R

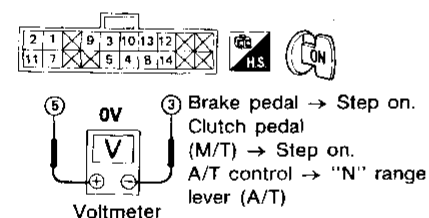
### DIAGNOSTIC PROCEDURE-3

**Cancel switch will not operate.**



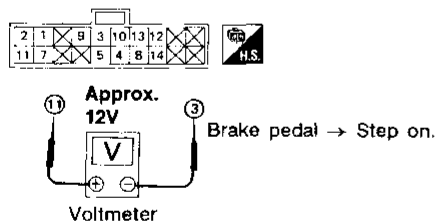
#### CUT-OFF CIRCUIT CHECK

1. Turn ASCD main switch to "ON".
2. Turn ASCD main switch to "ON" again.
3. Step on brake pedal.
4. Step on clutch pedal (M/T) or shift in "N" range (A/T).
5. Check voltage between ⑤ and ③.



#### STOP LAMP CIRCUIT CHECK

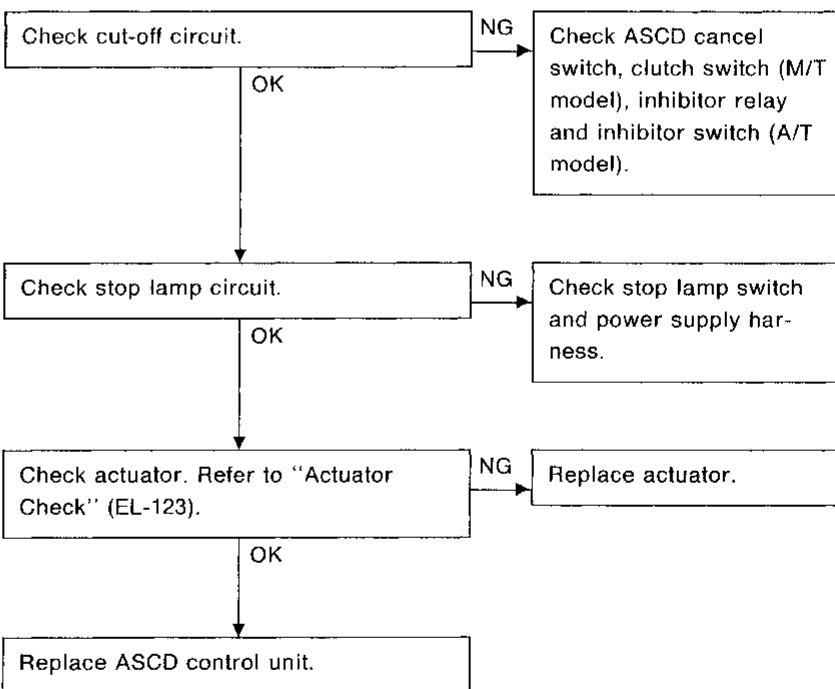
1. Step on brake pedal.
2. Check voltage between ① and ③.



SEL644QA

### DIAGNOSTIC PROCEDURE-4

**Set speed cannot be canceled.**

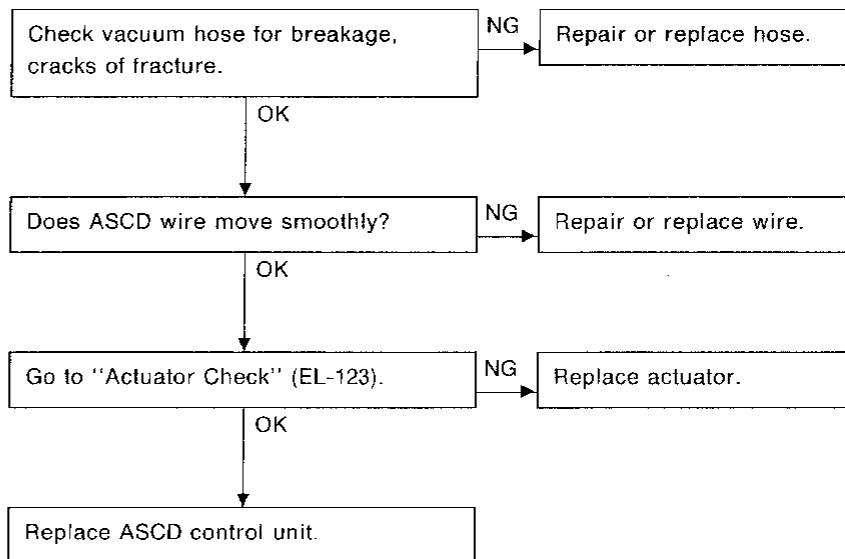


## AUTOMATIC SPEED CONTROL DEVICE (ASCD)

### Trouble Diagnoses (Cont'd)

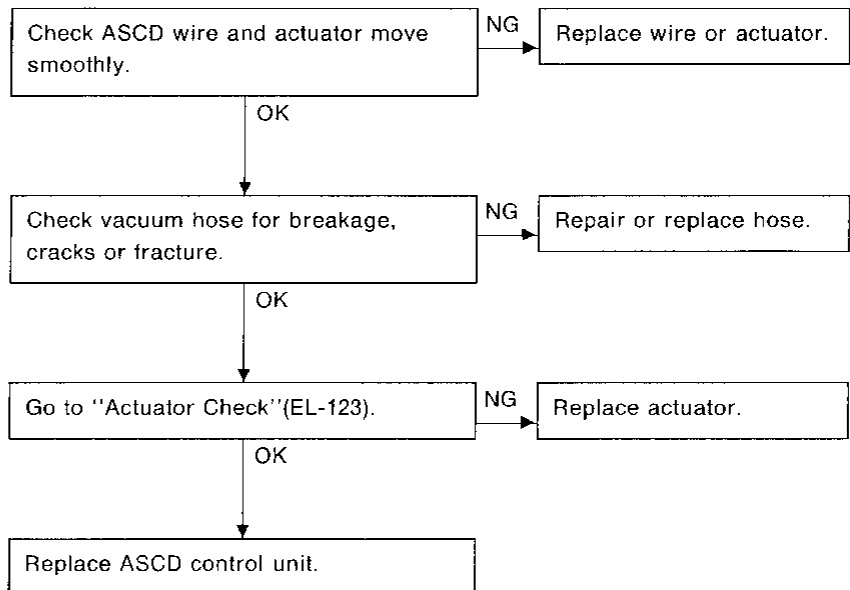
#### DIAGNOSTIC PROCEDURE-5

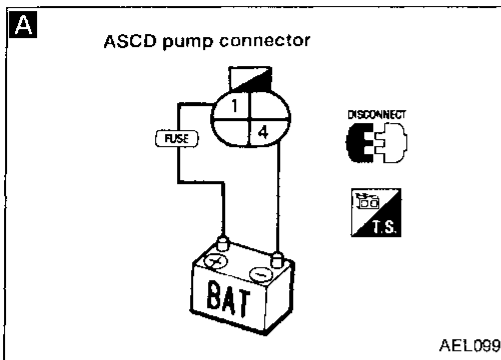
##### Engine hunts.



#### DIAGNOSTIC PROCEDURE-6

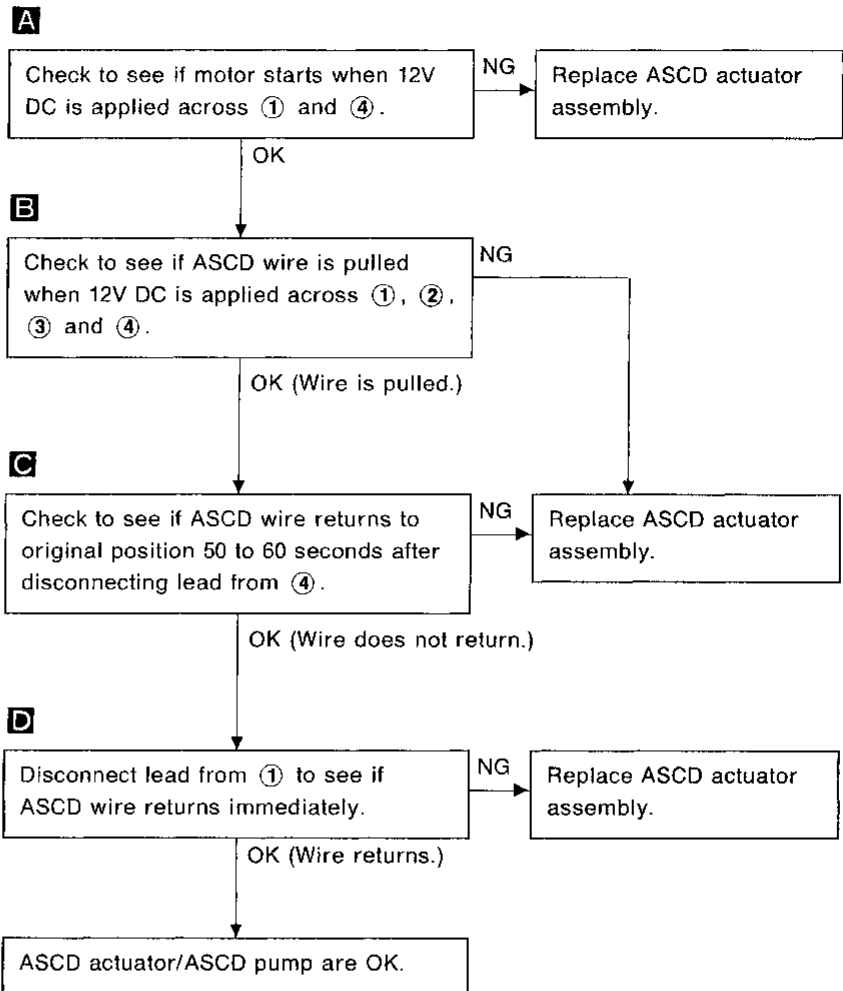
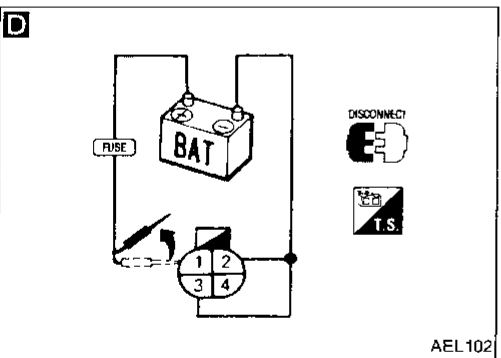
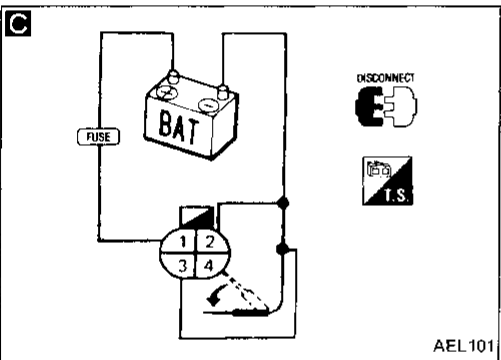
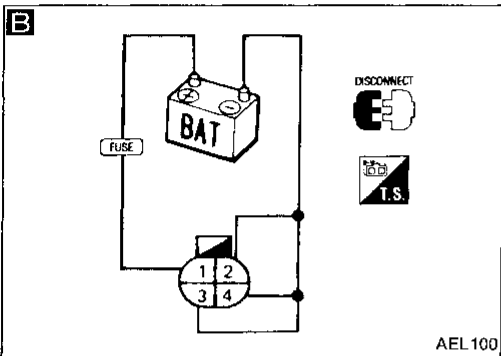
##### Large difference between set vehicle speed and actual speed.





## Actuator Check

1. Disconnect ASCD actuator/ASCD pump connector.
2. Check ASCD actuator/ASCD pump operations as shown.



GI

MA

EM

LC

EF &  
EC

FE

CL

MT

AT

FA

RA

BR

ST

BF

HA

EL

IDX

## **AUTOMATIC SPEED CONTROL DEVICE (ASCD)**

---

**NOTE**